

marginalis Lamarck. The failure to recognize this well-defined genus by most subsequent authors is a very remarkable fact.

In the preparation of the above remarks I am indebted in a very large degree to my friend Dr. A. E. Ortmann.

MOLLUSKS FROM MAGICIAN LAKE, CASS AND VAN BUREN COUNTIES, MICHIGAN.

BY FRANK C. BAKER.

Magician Lake lies between Van Buren County on the north and Cass County on the south. It is about two and a half miles long and half a mile wide. The banks on the north border are high but on the south, east and west they are for the most part low and swampy. The lake occupies an elongated depression in the Wisconsin drift and contains four deep holes, 40 to 60 feet in depth. The shores are shallow and shelving, and, with the exception of one or two short intervals, one may wade entirely around the lake. The outlet is at the southeast side (known as Silver Creek), and empties into the West branch of Dowagiac Creek, which drains into the St. Joseph River, a Lake Michigan stream. The migrations of the mollusks have probably been largely by the way of the St. Joseph, although some of the species may have reached this spot in post-glacial time via the Kankakee-St. Joseph portage; but the fauna as a whole probably reached these lakes by way of the Chicago outlet when Lake Michigan was in the Lake Chicago stage. It is evident that Magician Lake was once much higher, with a large, wide outlet, for high terraces may be seen on the south, and also bordering the outlet. Ancient marl beds exist, now covered by three feet of peat, containing mollusks of a colder climate, attesting the ancient occupancy of this lake by icy waters.

Mollusks were notably abundant in individuals and species. The species are listed by ecological regions. My thanks are due to Dr. Herman S. Pepoon for assistance in collecting much of the material.

Beach debris South Shore, all dead shells.

<i>Alasmidonta calceola</i> (Lea).	<i>Planorbis antrosus</i> Conrad.
<i>Anodonta grandis footiana</i> Lea.	<i>Planorbis antrosus angistomus</i>
<i>Lampsilis luteola</i> (Lam.).	Hald..
<i>Sphaerium simile</i> (Say).	<i>Planorbis parvus</i> Say.

<i>Sphaerium striatinum</i> (Lam.).	<i>Planorbis deflectus</i> Say.
<i>Musculium truncatum</i> (Lind).	<i>Segmentina armigera</i> (Say).
<i>Valvata tricarinata</i> Say.	<i>Galba obrussa decampi</i> (Streng).
<i>Amnicola limosa</i> (Say).	<i>Succinea retusa</i> Lea.
<i>Amnicola lustrica</i> (Pilsbry).	<i>Succinea avara</i> Say.
<i>Physa heterostropha</i> Say.	<i>Pyramidula cronkhitei anthonyi</i>
<i>Physa integra</i> Hald..	Pilsbry.
<i>Physa niagarensis</i> Lea.	<i>Zonitoides arborea</i> (Say).
<i>Planorbis trivolvis</i> Say.	<i>Vitrea rhoadsi</i> Pilsbry.
<i>Planorbis campanulatus</i> Say.	<i>Polygyra thyroides</i> (Say).
<i>Planorbis campanulatus</i> Say.	

Sandy beach on north side of Lake, water one to four feet deep.

<i>Alasmidonta calceola</i> (Lea).	<i>Amnicola limosa</i> (Say).
<i>Anodonta grandis footiana</i> Lea.	<i>Amnicola lustrica</i> Pilsbry.
<i>Anodonta marginata</i> Say.	<i>Campeloma integra</i> (Hald.).
<i>Anodontoides ferussacianus sub-</i>	<i>Physa heterostropha</i> Say.
<i>cylindraceus</i> Lea.	<i>Physa niagarensis</i> Lea.
<i>Lampsilis luteola</i> (Lam.).	<i>Planorbis antrosus</i> Conrad.
<i>Lampsilis ventricosa</i> (Barnes).	<i>Planorbis parvus</i> Say (dead).
<i>Valvata tricarinata</i> Say.	

Marsh above marl bed, east of Magician Lake cottages.

<i>Physa gyrina</i> Say.	<i>Planorbis antrosus angistomus</i>
<i>Aplexa hypnorum</i> (Linn.).	Hald.
	<i>Paludestrina nickliniana</i> (Lea).

Heavy damp woods south side of lake.

<i>Succinea retusa</i> Lea.	<i>Strobulops virgo</i> (Pilsbry).
<i>Pyramidula cronkhitei anthonyi</i>	<i>Polygyra thyroides</i> (Say).
Pilsbry.	<i>Polygyra monodon</i> (Rackett).
<i>Zonitoides arborea</i> (Say).	<i>Polygyra hirsuta</i> (Say).
<i>Vitrea hammonis</i> (Ström).	

In swale in woods.

<i>Sphaerium occidentale</i> (Prime).	<i>Galba obrussa</i> (Say).
<i>Aplexa hypnorum</i> (Linn.).	<i>Galba parva</i> (Lea).
<i>Segmentina armigera</i> (Say).	

Hemlock Island, west end of lake. The center of the island is about twenty feet above the level of the lake. All shells were found under old bark or fallen pieces of trees.

<i>Succinea retusa</i> Lea (found on	<i>Zonitoides arborea</i> (Say).
vegetation at margin of island).	<i>Vitrea indentata</i> (Say).

Helicodiscus parallelus (Say). *Strobilops labyrinthica* (Say).
Pyramidula cronkhitei anthonyi
Pilsbry.

NOTES.

VALVATA PISCINALIS IN CANADA.—I found last autumn in Homsher Bay, Toronto, inside the “sea-wall,” a flourishing colony of *Valvata piscinalis* Müll. There was much rubbish along the shore, including straw and marsh grass, such as is used abroad in packing fragile articles for export; and I have no doubt these little strangers were introduced from England or Eastern Europe in some such material. Another alien—long however known to have become established in the United States and at Cornwall in Ontario—*Bythinia tentaculata* L., abounds nearby, in the lagoons on the islands in Toronto Bay. I may add that these quiet waters also harbor fine specimens of *Anodonta cataracta* Say (*fluviatilis* Dillw.) and *Anodonta grandis* Say. Their occurrence in the same locality should end forever the contention that one is the eastern form and the other the western form of the same species. The same ecological conditions, and the commingling in the same water of the spermatozoa of both, would necessarily result in hybrids or extinction of differences if the two species were not naturally distinct, and each capable of preventing fertilization by the other.—F. R. LATCHFORD.

SOME EUROPEAN MOLLUSCA.—The receipt of a new part of Taylor’s beautiful monograph of the Land and Freshwater Mollusca of the British Isles reminds me of an observation on *Helicigona arbustorum* var. *alpicola* Fér., a small rather elevated variety of a yellowish color, with one band or none, which I found on the summit of the Rigi, in Switzerland. The soft parts were uniformly pale reddish instead of dark, and although Taylor states that the animal of this species varies independently of the shell, it seems possible here the two things go together, the *alpicola* form being perhaps a valid subspecies. At Zürich and Gersau, Switzerland, I found typical *arbustorum*; at the latter place also the yellowish bandless form. The varieties of *H. arbustorum*, with additional bands, figured by Taylor, are very interesting, but certainly the form with an